Application Number Docket Number (Ontional) MST-2393 US 10/723,795 INFORMATION DISCLOSURE CITATION Applicant(s) (Use everal sheets if necessary) Supuran et al. Filing Date Group Art Unit FEB 0 9 2004 November 26, 2003 OTHER DOCUMENTS (Including Author, Title, Date, resuments, 1964).

Details Estimated at "Carbonic Anhydrase Inhibitors: Water-Soluble 4-Sulfamovlphenylthioureas as Topical Intraocular Pressure-Lowering Agents with Long-Lasting Effects," J. Med. Chem., 43: 4884-4892 (2000) Chegwidden et al., "The Roles of Carbonic Anhydrase Isozymes in Cancer," Gene Families: Studies of DNA, RNA, Enzymes and Proteins, Proceedings of the International Isozymes, 10th, Beijing, China, Oct. 5-10, 1999, Meeting Date 1999, 157-169 (Xuc, G. ed.; World Scientifie Pub. Co.; 2001). Clare and Supuran, "Carbonic anhydrase iinhibitors. Part 61. Quantum chemical QSAR of a group of benzenedisulfonamides," Eur. J. Med. Chem., 34: 463-474 (1999) Cuthbert et al., "Bicarbonate-dependent chloride secretion in Calu-3 epithelia in response to 7,8-benzoquinoline," <u>J Physiol.,</u> 551(Pt 1): 79-92 (2003 Aug 15) Franchi et al., "Carbonic Anhydrase Inhibitors. Inhibition of Cytosolic Isozymes I and II and Transmembrane, Cancer-associated Isozyme IX with Lipophilic Sulfonamides," Journal of Enzyme Inhibition and Medicinal Chemistry, 18(4): 333-338 (Aug. 2003) Illes et al., "Carbonic Anhydrase Inhibitors. Inhibition of Tumor-Associated Isozyme IX by Halogenosulfanilamide and Halogenophenylaminobenzolamide Derivatives," J. Med. Chem., 46: 2187-2196 (2003) Pastorek et al., "Cloning and characterization of MN, a human tumor-associated protein with a domain homologous to carbonic anhydrase and a putative helix-loop-helix DNA binding segment," Oncogene, 9: 2877-2888 (1994) Scozzafava and Supuran, "Carbonic Anhydrase Inhibitors: Synthesis of N-Morpholylthiocarbonylsulfenylamino Aromatic/Heterocyclic Sulfonamides and their Interaction with Isozymes I, II and IV," <u>Bioorganic & Medicinal Chemistry Letters</u>, 19: 117-120 (2000) Scozzafava et al., "Carbonic Anhydrase Inhibitors. Synthesis of Water-Soluble, Topically Effective, Intraocular Pressure-Lowering Aromatic/Heterocyclic Sulfonamides Containing Cationic or Anionic Moleties: Is the Tail More Important than the King" J. Med. Chem. 42: 2641-266 (1999) Scozzafava et al., "Carbonic Anhydrase Inhibitors: Synthesis of Membrane-Impermeant Low Molecular Weight Sulfonamides Possessing in Vivo Selectivity for the Membrane-Bound versus Cytosolic Isozymes," J. Med. Chem., 43: 292-300 (Jan. 27, Sterling et al., "The functional and physical relationship between the DRA bicarbonate transporter and carbonic anhydrase II," Am. J. Physiol. Cell Physiol., 283(5): C1522-C1529 (Nov. 2002) Supuran and Clare, "Carbonic anhydrase inhibitors. Part 24. A quantitative structure-activity relationship study of positively charged sulfonamide inhibitors," Eur. J. Med. Chem., 30: 687-696 (1995) BF EXAMINER DATE CONSIDERED

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

/Brandon Fetterolf/

5/11/2009

		Docket Number (Optional)	Application Number	
OIF	2E	MST-2393 US	10/723,795	
	ORMATION DISCLOSURE CITATION (Ungeveral sheets if necessary)	Applicant(s) Supuran et al.		
FEB 0	9 2004	Filing Date	Group Art Unit	
E		November 26, 2003		
EXAMINER INITIAL DATE	OTHER DOCUMENTS (Including Author, Til		era - Marine V	
BF	Supuran and Clare, "Carbonic anhydrase inhibito 1,3,4-thiadiazoline disulfonamides with carbonic at	rs - Part 57: Quantum chemical QSAR ahydrase inhibitory properties," <u>Eur.</u>	of a group of 1,3,4-thiadiazole- and J. Med. Chem., 34: 41-50 (1999)	
	Supuran and Scozzafava, "Carbonic Anhydrase In Tumor Growth Inhibitors," <u>J. Enzyme Inhib., 15</u> (6	hibitors: Aromatic Sulfonamides and I 5): 597-610 (2000)	Disulfonamides Act as Efficient	
***************************************	agents?," Eur. J. Med. Chem., 35(9):867-874 (Sept			
47	, , , , , , , , , , , , , , , , , , ,	"Carbonic anhydrase inhibitors - Part 53. Synthesis of substituted-pyridinium derivatives of aromatic The first non-polymeric membrane-impermeable inhibitors with selectivity for isozyme IV," <u>Eur. J. Med.</u> 594 (1998)		
	Supuran et al., "Carbonic anhydrase inhibitors - P derivatives," <u>Eur. J. Med. Chem., 33</u> : 739-751 (199			
***************************************	Supuran et al., "Carbonic Anhydrase Inhibitors: S Pyridinium-Ethylcarboxamido Moleties Possessing Membrane-Bound (CA IV) Versus the Cytosolic (C			
and fiftheresessessessessessessessessessessessess	Supuran et al., "Carbonic Anhydrase Inhibitors: S 2(3): 703-714 (March 2001)	ulfonamides as Antitumor Agents?," <u>E</u>	Sigorganic & Medicinal Chemistry,	
-	Supuran et al., "Carbonic Anhydrase Inhibitors,"			
	Teicher et al., "A Carbonic Anhydrase Inhibitor as 1549-1556 (1993)			
10.	2003)	hibition of Cytosolic Isozymes I and II and Transmembrane, rnal of Enzyme Inhibition and Medicinal Chemistry, 18(5): 403-406 (Oct.		
	Vullo et al., "Carbonic Anhydrase Inhibitors: Inhi Sulfonamides," <u>Bioorganic Medicinal Chemistry L</u>			
ВГ	Wingo et al., "The Catalytic Properties of Human Communications, 288: 666-669 (2001)	Carbonic Anhydrase IX," <u>Biochemica</u>	l and Biophysical Research	
EXAMINER	/Brandon Fetterolf/	DATE CONSIDERED 5/11/2	009	
	itial if citation considered, whether or not citation is in conformation is in conformation to applicant.	ance with MPEP Section 609; Draw line th	rough citation if not in conformance and	

P09B/REV04

ita	Docket Number (Optional)	Application Number		
	MST-2393 US	10/723,795		
INDORMATION DISCLOSURE CITATION	Applicant(s)			
(Use everal sheets if necessary)	Supuran et al. Filing Date	Group Art Unit		
E FEB 0 9 2004 85	November 26, 2003	Group Art Umit		
OTHER DOCUMENTS (Including Author,				
BF Winum et al., "Carbonic Anhydrase Inhibitors. Tumor-Associated Isozyme Ix with Sulfamates I Chem., 46(11): 2197-2204 (May 22, 2003)	Inhibition of Cytosolic Isozymes I and I Including EMATE Also Acting as Steroid	l and Transmembrane, I Sulfatase Inbibitors," <u>J. Med.</u>		
Wistrand and Lindqvist, "Design of Carbonic A Pharmacokinetics of Acetazolamide," <u>In Carbor</u> <u>Medicine</u> , Botre et al., Eds., VCH, Weinheim, pț	nhydrase Inhibitors and the Relationshi nic Anhydrase – From Biochemistry and p. 352-378 (1991)	p Between the Pharmacodynamics and Genetics to Physiology and Clinical		
Wu et al., Cytoplasmic pH Responses to Carbon Epithelium, " J. Membrane Biol., 162: 31-38 (19	ic Anhydrase Inhibitors in Cultured Ral 98)	obit Nonpigmented Ciliary		
XAMINER /Brandon Fetterolf/	DATE CONSIDERED	200		
, brandon recterorry	5/11/20			
XAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and t considered. Include copy of this form with next communication to applicant.				

P09B/REV04